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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|-------------------------------|------------------|
| 10/669,944 | 09/24/2003 | Guy Moshe Cohen | YOR920030400US1 (8728-646) | 4798 |
| 46069 | 7590 | 08/09/2005 | EXAMINER | |
| F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797 | | | PALMER, PHAN T H | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2874 | |

DATE MAILED: 08/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,944

Applicant(s)

COHEN ET AL.

Examiner

PHAN T.H. PALMER

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) 21-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 12, 13 and 17 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 14-16 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Phan T. H. Palmer
PHAN T. H. PALMER
PRIMARY EXAMINER

08/07/2005

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Answer To Argument With Traverse

1. Applicant's election with traverse of Group I (claims 1-20) in the reply filed on July 08, 2005, is acknowledged. The traversal is on the ground(s) that as set forth in MPEP & 803, if the search and examination of an entire application can be made without serious burden, the examiner must examine it on the merits, even though the application contains claims to independent and distinct inventions. This is not found persuasive because examine the claim 1 (Group I) does not require the limitations of claim 21 (Group II) or the limitations of claim 31 (Group III). Since three Groups are three invention different, therefore if searching and examination of entire application is made serious burden for the Examiner.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's cooperation is requested in correcting any error of which applicant may become aware in the specification.

Drawings

3. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application. See attached Form PTO-948.

The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 6-9, 12, 13, and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Blonder (4,904,036).

The Blonder reference discloses in figure 1, an optical communications apparatus, comprising: a single crystal semiconductor base (10); at least two optoelectronic chips (OE) mounted on the surface; an integrated circuit chip (IC); wherein the OE chip, and the IC chip are mounted on the substrate and electrically connected.

With regard to claim 1, the Blonder et al reference discloses all the claimed invention of this claim.

With regard to claim 3, wherein the IC chip comprises a laser driver is disclosed in the Blonder reference (circuit 40 in figure 1).

With regard to claim 6, wherein the apparatus comprises an OE receiver package, an OE transmitter package, or an OE transmitter package, or an OE transceiver package is disclosed in the Blonder reference (see in abstract).

With regard to claim 7, wherein the substrate comprises a silicon substrate, is disclosed in the Blonder reference (see in abstract).

With regard to claim 8, further comprising an optical transmission line mounted or formed on the substrate is disclosed in the Blonder reference (see optical fiber 18 in figure 1).

With regard to claim 9, wherein the OE chip and optical transmission line (optical fiber 18, and waveguide 14) are disposed on the optical substrate such that a center axis of the optical transmission line is substantially perpendicular to a light-emitting or light receiving surface of the OE chip (laser diode 16) is disclosed in the Blonder et al. (see figure 1).

With regard to claim 12, wherein the optical transmission line comprises an optical fiber mounted on the optical bench, is disclosed in the Blonder reference (optical fiber 18, in figure 1).

With regard to claim 13, wherein the optical transmission line comprises a waveguide structure (14) formed on the surface of the substrate, is disclosed in the Blonder reference (see waveguide 14 in figure 1).

With regard to claim 17, wherein the electrical turning via is terminated with solder bumps, is disclosed in the Blonder reference (see solder bumps 46, in figure 4).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blonder (4,904,036).

With regard to claims 2, 4, and 5, wherein the OE chip comprises a vertical-cavity surface-emitting laser bar (VCSEL) or a photo detector array, or an amplifier are well known in the art, therefore obvious disclosed in the Blonder reference.

Allowable Subject Matter

6. Claims 10-11, 14-16, and 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The Blonder reference does not disclose the limitations of claims 10-11, 14-16, and 18-20. Since these limitations are critically, the optical communication apparatus is improved efficiency and increased data speed in fiber optic communication; it provides efficient and accurate alignment for directly coupling OE devices and fibers, as well as compact designs for purposes of high-speed operation and space efficiency.

CONTACT INFORMATION

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHAN T.H. PALMER whose telephone number is (571) 272-2354. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, RODNEY B. BOVERNICK can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PTHP
08/06/2005


PHAN T. H. PALMER
PRIMARY EXAMINER